

PATENT
674509-2035**AMENDMENT**

Kindly amend the application, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

IN THE CLAIMS:

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, to read as follows:

1. (Currently Amended) A composition comprising
 - (i) a surface coating material;
 - (ii) a first substrate, wherein the first substrate is ~~a carbohydrate or a sugar~~ selected from oligomers and polymers of substrates for oxidative enzymes;
 - (iii) a first enzyme;
 - (iv) a second enzyme, wherein the second enzyme is an oxidase ~~a hexose-oxidase~~;wherein the first substrate and the first enzyme react to generate a second substrate, wherein the second substrate is selected from the group consisting of D-glucose, D-galactose, D-mannose, maltose, lactose and cellobiose, upon which the second enzyme acts, whereby an anti-foulant compound is generated which is long-acting.
2. (Previously Presented) A composition according to claim 1 wherein the second enzyme is from a marine algae.
3. (Previously Presented) A composition according to claim 1 wherein the second enzyme is from *Chondrus crispus*.
- 4-8. (Cancelled)
9. (Previously Presented) A composition according to claim 1 wherein the first enzyme is amyloglucosidase.
10. (Previously Presented) A composition according to claim 1 wherein the first substrate is starch.
11. (Previously Presented) A composition according to claim 1 wherein the composition further comprises a binder to immobilise at least one of the constituents of the composition.
12. (Original) A coating consisting of a composition according to claim 1.

PATENT
674509-2035

13. (Original) A coating according to claim 12 formulated for treatment of a surface selected from outdoor wood work, external surface of a central heating system, and a hull of a marine vessel.

14 (Previously Presented) A marine anti-foulant consisting of a composition according to claim 1.

15. (Previously Presented) A marine anti-foulant according to claim 14 wherein the anti-foulant is self-polishable.

16-29. (Cancelled)

30. (Previously Presented) A composition comprising

- (i) a surface coating material;
- (ii) a first substrate;
- (iii) amyloglucosidase as a first enzyme;
- (iv) hexose oxidase as a second enzyme;

wherein the first substrate and the first enzyme react to generate a second substrate upon which the second enzyme acts, whereby an anti-foulant compound is generated.

31. (Previously Presented) The composition of claim 30, wherein the hexose oxidase is from a marine organism.

32. (Previously Presented) The composition of claim 31, wherein the hexose oxidase is from *Chondrus crispus*.

33. (Previously Presented) The composition of claim 30, wherein the hexose oxidase enzyme comprises the amino acid sequence set out in SEQ ID NO: 2.

34. (Previously Presented) The composition of claim 30, wherein the second substrate is a sugar.

35. (Previously Presented) The composition of claim 34, wherein the sugar is glucose.

36. (Previously Presented) The composition of claim 30, wherein the first substrate is starch.

37. (Previously Presented) The composition of claim 1, wherein the anti-foulant acts for at least four weeks.

38. (Previously Presented) The composition of claim 1, wherein the anti-foulant acts for at least two years.

PATENT
674509-2035

39. (New) The composition of claim 1, wherein the second enzyme is a hexose oxidase.

40. (New) The composition of claim 1, wherein the composition is formulated as a coating, lacquer, stain or enamel.

41. (New) The composition of claim 12, wherein the coating materials are selected from polyvinyl chloride resins in a solvent based system, chlorinated rubbers in a solvent based system, acrylic resins and methacrylate resins in solvent based or aqueous systems, vinyl chloride-vinyl acetate copolymer systems as aqueous dispersions or solvent based systems, butadiene copolymers such as butadiene-styrene rubbers, butadiene-acrylonitrile rubbers, and butadiene-styrene-acrylonitrile rubbers, drying oils such as linseed oil, alkyd resins, asphalt, epoxy resins, urethane resins, polyester resins, phenolic resins, derivatives and mixtures thereof.